

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-11. (Canceled)

12. (Currently Amended) A method for supplying an electronic document based on XML using a syntax defining a structure of the electronic document, the method, comprising:

supplying a document including an invalid element to delete ~~subsequently invalid contents-a metadata fragment related to a television program~~ contained in a corresponding previously supplied document, wherein deletion of ~~predetermined contents of the corresponding document~~ ~~said metadata fragment related to said television program~~ is notified by adding to-be-deleted ~~contents~~ ~~fragment~~ to the invalid element.

13. (Currently Amended) The method of claim 12, wherein the to-be-deleted ~~contents~~ ~~fragment~~ contained as contents of the invalid element within the supplied document is an identifier element, and wherein when the identifier element is supplied as the contents of the invalid element, the corresponding entire document is deleted.

14. (Currently Amended) The method of claim 12, wherein when an identifier identifying the corresponding document within the supplied document is contained and only the to-be-deleted contents fragment of the corresponding document are contained as the invalid element, only the corresponding contents fragment contained in the invalid element are deleted.

15. (Currently Amended) The method of claim 12, wherein the to-be-deleted contents fragment are identified by the invalid element.

16-19. Canceled

20. (Currently Amended) A method for updating contents of metadata fragment included in an electronic document based on XML describing a broadcasting program, wherein a prescribed content metadata fragment is stored in a client, the method comprising:

requesting an updated version of said prescribed content metadata fragment to a provider;

receiving an invalid element notifying which notifies at least one version of said prescribed content before said requested updated version of said prescribed content

metadata fragment is an invalid content fragment, wherein said prescribed content metadata fragment is identified by content version numbers a fragment identification; and

deleting said prescribed content metadata fragment notified as said invalid content fragment from said client.

21. Canceled

22. (Currently Amended) A method for updating an electronic document based on XML, wherein said electronic document is which includes a fragment describing metadata for a television broadcasting program that is stored in a client, the method comprising:

requesting an updated version of said fragment to a provider;

receiving an invalid element notifying a version of said fragment before said requested version as an invalid fragment, wherein said fragment is identified by at least one member chosen from the group of a fragment identification and a fragment version; and

deleting said fragment notified as said received invalid fragment from said client.

23. (Previously Presented) The method of claim 22, wherein said fragment is previously received and stored in said client.

24. (Previously Presented) The method of claim 22, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document, and wherein said syntax is XML schema.

25. (Previously Presented) The method of claim 22, wherein said deleting includes identifying said fragment identified by said fragment identification from said client.

26. (Previously Presented) The method of claim 22, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

27. (Previously Presented) The method of claim 26, wherein said invalid attribute is defined by a syntax defining a structure of said electronic document, wherein said syntax is XML schema.

28. (Currently Amended) A method for updating a fragment based on XML, wherein said fragment stored in a client describes metadata related on a broadcasting program, the method comprising:

requesting a updated version for said fragment to a provider; and

deleting said fragment from said client when said fragment is notified as invalid
fragment by an invalid element by supplied from said provider, wherein said fragment is
identified by a fragment identification ~~or a fragment version~~.

29. (Previously Presented) The method of claim 28, wherein said fragment is previously received and stored in said client.

30. (Previously Presented) The method of claim 28, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document.

31. (Previously Presented) The method of claim 30, wherein said syntax is XML schema, and wherein the broadcasting program is a television broadcasting program.

32. (Previously Presented) The method of claim 28, wherein said deleting step includes identifying said fragment identified by said fragment identification from said client.

33. (Previously Presented) The method of claim 28, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

34. (Previously Presented) The method of claim 33, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

35. (Previously Presented) The method of claim 34, wherein said syntax is XML schema.

36. (Currently Amended) A method for updating a fragment based on XML describing metadata related on a broadcasting program, wherein said fragment is stored in a client, the method comprising:

receiving a request for an updated version of said fragment from said client; and

supplying said client with an invalid element notifying said fragment as an invalid fragment, wherein said fragment is identified by ~~at least one member chosen from an a fragment identification and an fragment version.~~

37. (Previously Presented) The method of claim 36, wherein said fragment is previously supplied.

38. (Previously Presented) The method of claim 36, wherein said invalid element and said invalid fragment are defined by a syntax defining a structure of an electronic document.

39. (Previously Presented) The method of claim 38, wherein said syntax is XML schema.

40. (Previously Presented) The method of claim 36, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

41. (Previously Presented) The method of claim 40, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

42. (Previously Presented) The method of claim 41, wherein said syntax is XML schema.

43. (Currently Amended) A method for updating fragment stored in a client describing metadata related on a television broadcasting program, wherein said fragment is based on XML, the method comprising:

identifying a predetermined version of said fragment as an invalid fragment;

receiving a request for an updated version of said fragment from said client, ~~wherein said predetermined version of said fragment is before said requested updated version of said fragment; and~~

supplying said client with an invalid element notifying ~~said predetermined version of said fragment as an invalid fragment, wherein said fragment is identified by a fragment identification or an fragment version.~~

44. (Previously Presented) The method of claim 43, wherein said fragment is previously supplied.

45. (Previously Presented) The method of claim 43, wherein said invalid element and said invalid fragment are defined by a syntax defining a structure of an electronic document.

46. (Previously Presented) The method of claim 45, wherein syntax is XML schema.

47. (Previously Presented) The method of claim 43, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

48. (Previously Presented) The method of claim 47, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

49. (Previously Presented) The method of claim 48, wherein said syntax is XML schema.

50. (Currently Amended) A method for processing a response to a request for updating a fragment based on XML describing metadata related on a broadcasting program, wherein said fragment is stored in a client, the method comprising:

receiving an invalid element to delete said fragment identified by a fragment identification supplied from a provider, wherein said invalid element which notifies said fragment is an invalid fragment;

identifying said fragment identified by said fragment identification from said client; and

controlling to delete said identified fragment from said client ~~in accordance with said received invalid fragment.~~

51. (Previously Presented) The method of claim 50, wherein said fragment is previously received and stored in said client.

52. (Previously Presented) The method of claim 50, wherein said invalid element is defined by a syntax defining a structure of an electronic document.

53. (Previously Presented) The method of claim 52, wherein said syntax is XML schema, and wherein the broadcasting program is a television broadcasting program..

54. (Previously Presented) The method of claim 50, wherein said fragment can be notified as invalid fragment by an invalid attribute.

55. (Previously Presented) The method of claim 54, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

56. (Previously Presented) The method of claim 55, wherein said syntax is XML schema.

57. (Previously Presented) A method for replying to a request for updating a fragment stored in a client describing metadata related on a broadcasting program, wherein said fragment is based on XML, the method comprising:

supplying said client with an invalid element to delete said fragment identified by a fragment identification, wherein said invalid element notifies said fragment is an invalid fragment.

58. (Previously Presented) The method of claim 57, wherein said fragment is previously received and stored in said client.

59. (Previously Presented) The method of claim 57, wherein said invalid fragment and said invalid element are defined by a syntax defining a structure of an electronic document.

60. (Previously Presented) The method of claim 59, wherein said syntax is XML schema.

61. (Previously Presented) The method of claim 57, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

62. (Previously Presented) The method of claim 61, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

64. (Currently Amended) A method for processing a response ~~of including~~ an invalid element ~~notifying which notifies~~ a fragment stored in a client is an invalid fragment ~~in~~ responsive to a request for updating said fragment, wherein said fragment is based on XML and describes metadata for a television broadcasting program, the method comprising:

identifying said fragment ~~using by~~ a fragment identification from said client;
and

controlling to delete said identified fragment from said client ~~in accordance with said received invalid fragment.~~

65. (Previously Presented) The method of claim 64, wherein said fragment is previously received and stored in said client.

66. (Previously Presented) The method of claim 64, wherein said invalid element is defined by a syntax defining a structure of an electronic document.

67. (Previously Presented) The method of claim 66, wherein said syntax is XML schema.

68. (Previously Presented) The method of claim 64, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

68. (Previously Presented) The method of claim 64, wherein said fragment can be notified as said invalid fragment by an invalid attribute.

69. (Previously Presented) The method of claim 68, wherein said invalid attribute is defined by a syntax defining a structure of an electronic document.

70. (Previously Presented) The method of claim 69, wherein said syntax is XML schema.